

REMARKS

Status of Claims

Upon entry of this Amendment, claims 31-33 will have been amended and claims 55-72 will have been added. Accordingly, claims 31-48 and 50-72 will be pending, with claims 31, 32 and 33 being independent.

Summary of the Official Action

In the instant Office Action, the Examiner rejected claims 31-48 and 50-54 over the art of record. By the present amendment and remarks, Applicant submits that the rejections have been overcome, and respectfully request reconsideration of the outstanding Office Action and allowance of the present application.

Interview of October 21, 2003

As a preliminary matter, Applicant notes that despite Applicant's repeated requests for an Interview with the Examiner and his supervisor, the Examiner indicated, after speaking with his supervisor, that his supervisor was unwilling at this point in the prosecution to sit-in during such an interview and that such attendance was not required when the Examiner was fully capable of determining whether the claims are allowable over the prior art documents.

In the Interview, Applicant's representative discussed in detail each of the issues identified in the "Request For An Interview" faxed to the Examiner on October 15, 2003. In response, the Examiner reiterated that the current rejections are proper and that he is free to interpret the claims broadly.

Applicant's representative disagreed with the Examiner's broad interpretation of the claims and noted that the Examiner was clearly disregarding recited claim language. The Examiner indicated that he was free to do so and that he reviewed the claims for structural features only.

Finally, Applicant's representative proposed amending claims 31-33 in an attempt to even more clearly define over the applied documents. The Examiner agreed to reconsider the rejections if the claims were so amended and specifically agreed that the clip 22 does not bias any tools against a rotor with a spring force.

Applicant notes that claims 31 and 32 have been herein amended to recite the features discussed in the Interview and have been further amended to even more clearly define the invention over the applied documents. Claim 33 as presented herein is substantially the same as claims 33 discussed in the Interview.

Traversal of Rejections Under 35 U.S.C. § 102

Applicant traverses the rejection of claims 31-48 and 50-54 under 35 U.S.C. § 102(b)

as being anticipated by U.S. Patent No. 4,050,519 to VAN DER LELY.

Applicant also traverses the rejection of claims 31-33, 35-38, 40-44, 48 and 50-54 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,246,704 to HONDA.

The Examiner asserted that each of these documents discloses all the features recited in these claims including tools which have a ring portion and a mechanism which biases the tools against the rotor. Applicant respectfully traverses each of these rejections.

Notwithstanding the Office Action assertions as to what these documents disclose, Applicant submits that each of VAN DER LELY, HONDA, OSTHAUS and ARIENS clearly lacks: inter alia, each fixing end being *freely movably mounted to the rotor via an axle and a mechanism that applies a spring force against the fixing ends of the tools such that the fixing ends of the tools are biased against the rotor*, wherein the fixing ends of the tools are arranged between the rotor and the mechanism as recited in claim 31; inter alia, each fixing end comprising *a ring portion which is freely movably mounted to the rotor via an axle and a mechanism that applies a spring force against the ring portions of the tools such that the ring portions of the tools are biased against the rotor*, wherein the ring portions of the tools are arranged between the rotor and the mechanism, as recited in claim 32; and inter alia, a fixing end comprising an upper space zone, *a ring adapted to receive a journal axle*, and a pivot axis, wherein the fixing portion extends from an upper end of the connecting portion and wherein the active portion extends from a lower end of the connecting portion, *wherein*

the fixing portion extends from one side of the connecting portion and wherein the active portion extends from another side of the connecting portion, as recited in claim 33.

Applicant notes that there is entirely no disclosure to any of these recited features in VAN DER LELY. To the contrary, Fig. 2 of VAN DER LELY shows tools 25 which are non-movably fixed to a rotor via flanges 23. It is noteworthy that the tools 25 do not move with regard to flanges. Thus, there is no apparent need to any biasing mechanisms. In contrast, Applicant's invention provides a biasing mechanism, e.g., plate 14, which biases the tools 1 against the rotor 12. Finally, Applicant notes that the Examiner has acknowledged in the Interview that the clip 22 does not apply a spring force and therefore does not act to bias anything.

It is also clear that the tools 25 do not have a ring portion and are freely movably mounted. To the contrary, the tools 25 are fixed to an internal opening of the flanges 23. Thus, there is no apparent need to provide the tools with ring portions. In contrast, Applicant's invention provides a ring portion, e.g., 2, which allows the tools to be both freely movably mounted and fixed to the rotor 12.

Finally, it is clear that VAN DER LELY lacks any disclosure with regard to a tool which includes a fixing end comprising an upper space zone, *a ring adapted to receive a journal axle*, and a pivot axis, wherein the fixing portion extends from an upper end of the connecting portion and wherein the active portion extends from a lower end of the

connecting portion, *wherein the fixing portion extends from one side of the connecting portion and wherein the active portion extends from another side of the connecting portion.*

To the contrary, it is clear from the figures that the tools 25 are merely fixed at their top portions and extend only downwardly therefrom.

Similarly, Applicant submits that there is entirely no disclosure to any of these recited features in HONDA. To the contrary, Fig. 2 of HONDA shows tools 20 which are fixed to a rotor 3 via holders 13. It is noteworthy that the tools 20 do not move with regard to the holders 13. In contrast, Applicant's invention provides a biasing mechanism, e.g., plate 14, which biases the tools 1 against the rotor 12.

It is also clear that the tools 20 do not have a ring portion and are not freely movably mounted. To the contrary, the tools 20 are fixed via two diagonally arranged openings to the holders 13. Thus, there is no apparent need to provide the tools with ring portions, much less, ring portions that allow the tools to be freely movably mounted to the rotor. In contrast, Applicant's invention provides a ring portion, e.g., 2, which allows the tools to be both freely movably mounted and fixed to the rotor 12.

Finally, it is clear that HONDA lacks any disclosure with regard to a tool which includes a fixing end comprising an upper space zone, *a ring adapted to receive a journal axle*, and a pivot axis, wherein the fixing portion extends from an upper end of the connecting portion and wherein the active portion extends from a lower end of the

connecting portion, *wherein the fixing portion extends from one side of the connecting portion and wherein the active portion extends from another side of the connecting portion.*

To the contrary, it is clear from the figures that the tools 20, which are merely C-shaped, do not have ring portions, are not movably mounted via the fixing portions, are not adapted to receive a journal axle, and do not have a fixing portion which extends from one side of the connecting portion and an active portion which extends from another side of the connecting portion.

Next, Applicant submits that there is entirely no disclosure to any of these recited features in OSTHAUS. To the contrary, Fig. 1 of OSTHAUS shows tools 6 which are fixed to a rotor 3 via holders 7. It is noteworthy that the tools 6 do not move with regard to the holders 7, are clearly not freely movable, and are not biased by the rubber springs 9. Instead, the tools 6 can only move when sufficient force is applied to overcome the torsion resisting force of the rubber spring 9. In contrast, Applicant's invention provides tools that are freely movably mounted and are biased against the rotor using, e.g., a plate 14, which biases the tools 1 against the rotor 12.

Applicant acknowledges that OSTHAUS discloses tools 6 which have what appears to be ring portions. However, it is clear that the rubber springs 9 cannot be characterized as a mechanism that applies a spring force against the ring portions of the tools such that the ring portions of the tools are biased against the rotor. To the contrary, the rubber springs 9

merely act to mount the tools 6 to the rotor 3 in a manner which allows the tools 6 to deflect torsionally when they are impacted. Nor can it be properly said that this document discloses that the ring portions of the tools 6 are arranged between the rotor and the rubber springs 9. Instead, each ring portion is arranged between the head of a bolt 12 and a bushing 11 (see Fig. 4). In contrast, Applicant's invention provides a ring portion, e.g., 2, which allows the tools to be both freely movably mounted and fixed to the rotor 12.

Finally, it is clear that OSTHAUS lacks any disclosure with regard to a tool which includes a fixing end comprising an upper space zone, a ring adapted to receive a journal axle, and a pivot axis, wherein the fixing portion extends from an upper end of the connecting portion and wherein the active portion extends from a lower end of the connecting portion, *wherein the fixing portion extends from one side of the connecting portion and wherein the active portion extends from another side of the connecting portion.* To the contrary, it is clear from the figures that the tools 20, which are merely C-shaped, do not have ring portions, are not movably mounted via the fixing portions, are not adapted to receive a journal axle, and do not have a fixing portion which extends from one side of the connecting portion and an active portion which extends from another side of the connecting portion.

With regard to ARIENS, Applicant acknowledges that this document discloses tools 14 which are biased away from a rotor 7 using springs 25. However, Applicant submits that

such disclosure is hardly suggestive of the above-noted recited features. To the contrary, Fig. 4 of ARIENS merely shows tools 14 which are fixed to a rotor 7 via pivots 17. It is noteworthy that the tools 14 do not move freely with regard to the rotor 7 and are not biased by the springs 25 against the rotor 7. Instead, the tools 14 can only move when sufficient force is applied to overcome the spring 25 resisting force and are biased away from the rotor 7. In contrast, Applicant's invention provides for tools that are freely movably mounted and are biased against the rotor using, e.g., a plate 14, which biases the tools 14 against the rotor 7.

Applicant acknowledges that ARIENS discloses tools 14 which have what appears to be ring portions 16. However, it is clear that the springs 25 cannot be characterized as a mechanism that applies a spring force against the ring portions of the tools such that the ring portions of the tools are biased against the rotor. To the contrary, the springs 25 merely act to mount the tools 14 to the rotor 7 in a manner which allows the tools 14 to deflect away from a direction of rotation when they are impacted. Nor can it be properly said that this document discloses that the ring portions 16 of the tools 14 are arranged between the rotor 7 and the springs 25. Instead, each ring portion 16 is arranged between the head 17 of a bolt and a holder 11 (see Fig. 1). In contrast, Applicant's invention provides a ring portion, e.g., 2, which allows the tools to be both freely movably mounted and fixed to the rotor 12.

Finally, it is clear that ARIENS lacks any disclosure with regard to a tool which

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includes a fixing end comprising an upper space zone, a ring adapted to receive a journal axle, and a pivot axis, wherein the fixing portion extends from an upper end of the connecting portion and wherein the active portion extends from a lower end of the connecting portion, *wherein the fixing portion extends from one side of the connecting portion and wherein the active portion extends from another side of the connecting portion.*

To the contrary, it is clear from the figures that the tools 20, which are merely C-shaped, do not have ring portions, are not movably mounted via the fixing portions, are not adapted to receive a journal axle, and do not have a fixing portion which extends from one side of the connecting portion and an active portion which extends from another side of the connecting portion.

Applicant respectfully submits that, for an anticipation rejection under 35 U.S.C. § 102(b) to be proper, each element of the claim in question must be disclosed in a single document, and if the document relied upon does not do so, then the rejection must be withdrawn.

Because each of these documents fails to disclose at least the above mentioned features as recited in amended independent claims 31-33, Applicant submits that each of these documents do not disclose all the claimed features recited in at least independent claims 31-33.

Finally, Applicant submits that claims 34-48 and 50-54 are allowable at least for the

reason that these claims each depend from an allowable base claim and because these claims recite additional features that further define the present invention. In particular, Applicant submits that no proper reading or modification of the applied document discloses or suggests, in combination: that the fixing end comprises an opening which is concentric to the pivot axis as recited in claim 34; that the soil cultivating machine comprises one of a weeding machine, a hoeing machine, and a vineyard plow when the tool is installed on a rotor as recited in claim 35; that the tool is adapted to be interchangeably mounted to a rotor when the tool is installed on a rotor as recited in claim 36; that the connecting portion is arranged to be inclined relative to a center axis running through a rotor when the tool is installed on a rotor as recited in claim 37; that the soil engaging portion extends radially outwardly from the fixing end as recited in claim 38; that the fixing end comprises a ring adapted to receive a journal axle as recited in claim 39; that the tool comprises a shape which resembles one of a hook and an “L” as recited in claim 40; that the soil engaging portion comprises at least one curved portion as recited in claim 41; that the active portion has an inclined portion and includes a first lower surface and a second lower surface, the first lower surface being arranged above the second lower surface when the at least one tool is mounted on a rotor as recited in claim 42; that the active portion comprises a boss portion as recited in claim 43; that the tool is installed on a rotor which is rotatably mounted on a soil cultivating machine as recited in claim 44; that when the tool is mounted on a rotor, the tool is adapted to pivot

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freely between an angle of 0° to 180° as recited in claim 45; that the tool is adapted to pivot freely between an angle of 45° to 65° as recited in claim 46; that when the tool is mounted on a rotor, the tool is adapted to pivot freely by an angle which is equal to or greater than 180° as recited in claim 47; that the pivot axis is not parallel to a center axis of a rotor when the tool is mounted to a rotor as recited in claim 48; that when the tool is mounted on a rotor, a guide is arranged adjacent a rotor as recited in claim 50; that when the tool is mounted on a rotor, a fixing flange is arranged to help retain the tool on a rotor as recited in claim 51; that the active portion comprises a surface that is approximately planar as recited in claim 52; that the active portion comprises a surface that is approximately planar and is oriented at an angle relative to a plane that is substantially perpendicular to the pivot axis as recited in claim 53; and that the angle is on the order of 6 degrees as recited in claim 54.

Accordingly, Applicant requests that the Examiner reconsider and withdraw the above-noted rejection of the claims under 35 U.S.C. § 102(b).

New Claims are also Allowable

Applicant submits that the new claims are also allowable over the applied art of record. In particular, Applicant submits that claims 55-72 depend from allowable claims and further recite a combination of features which are not disclosed or suggested by the applied art of record.

Accordingly, Applicant respectfully requests consideration of these claims and further requests that the above-noted claims be indicated as allowable.

CONCLUSION

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious Applicant's invention as recited in each of the pending claims. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all the claims therein are respectfully requested and now believed to be appropriate.

Please charge any fees necessary for consideration of the papers filed herein and refund excess payments to Deposit Account No. 19-0089.

Should the Examiner have any further comments or questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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December 4, 2003
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